Task: 4322 4467



State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

December 21, 2011

Rick Havenstrite Desert Hawk Gold Corporation 1290 Holcomb Ave. Reno, Nevada 89502

Subject:

Third Review of Notice of Intention to Commence Large Mining Operations, Desert Hawk Gold Corporation, Kiewit Project Mine, M/045/0078, Tooele County, Utah

Dear Mr. Havenstrite:

The Division of Oil, Gas and Mining has completed a review of your Notice of Intention to Commence Large Mining Operations for the Kiewit Project Mine, which was received August 24, 2011, and supplemented with information received October 25, 2011. The attached comments will need to be addressed before tentative approval may be granted.

You have already received a draft copy of this review. There are numerous wording and punctuation changes between that version and this but only a few changes that are substantive.

The Division will suspend further review of the Notice of Intention until your response to this letter is received. If you have any questions in this regard please contact me at 801-538-5261 or Leslie Heppler at 801-538-5257. Thank you for your cooperation in completing this permitting action.

Sincerely,

Paul B. Baker

Minerals Program Manager

PBB:lah:eb

Attachment: Review

ce: Keith Moeller keith@cliftonmining.com

BLM - SAllen@blm.gov

DEQ - MNovak@utah.gov

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THIRD REVIEW OF NOTICEOF INTENTION TO COMMENCE LARGE MINING OPERATIONS

Desert Hawk Gold Corporation Kiewit Project M/045/0078 December 21, 2011

General Comments:

Com ment #	Sheet/Page/ Map/Table #	Comments	Initia ls	Revie w Actio n
1	General	Submittal should be formatted to easily incorporate additional revisions and amendments. All revisions are to refer to comment number and also page where revisions were made.	lah	
2	General	additional comments from the Division can be generated in the future based on ubmittals received in the future. A cover-to-cover review will need to be done in the final plan before it is stamped.		
3	General	A legal description is needed to define the boundary of the Kiewit ore body which will not be mined until approval has been given by the BLM. This is needed prior to Kiewit and any other mining from BLM land.		
4	Page 1 Para 1	Reword, without using the word "exploit"		
5	Appendices	Appendix IV – Appendix IV is the Yellow Hammer small mine permit. Please insert the SMO.		
6	Omission	Add the corrected Herat small mine permit.	lah	
7	Appendices	Appendix V – Re-label appendix as Geochemical and Analytical Data (geotechnical is soil).	lah	
8	Appendix V	Open File Repor 91-114 shows high Fe (up to 15%) and high As (greater than 10,000 ppm) indicating arsenopyrite in the Clifton Shears area. Rock characterization is needed as USGS Geochemical results indicate it will be acid generating. Section 6.0 on page 9 of this appendix includes no analytical data to back up the text (low sulfides, acid neutralization potential).	lah	
9	Appendix VI	Appendix VI – This appendix contains geochemical data and not heap leach liner specifications, as labeled.		
10	NOI Page 12	The plan contains a commitment in the third paragraph on page 12 to net the pregnant solution pond. Logically the process pond should also be netted. Please state whether this pond will be netted and give justification if it will not.		
11	Appendices			

Com ment #	Sheet/Page/ Map/Table #	Comments	Initia Is	Revie w Actio n
12	upside down. b) The permit boundary is incorrect on GWP-1 and GWP-3; please correct with DWQ and OGM. c) A new sediment pond design has been submitted to OGM; please also submit changes on GWP-10 to DWQ and OGM.		Lah	
13	Appendices	Appendix XVI – DEQ Construction Permits . These permits will be needed prior to the Division issuing approval.		
14	Appendices	Appendix XVII – Correspondence – Please include this information prior to approval.		
15	Appendices			
16	Appendices	Appendix XIX – Page 7 has a place for a PE stamp, but the stamp is missing. Please stamp and resubmit.	lah	
17	Page 29	The first paragraph on this page says a cultural resource survey of the project area has been completed, but there are portions of the project area that were not included in the survey. Please note this in the text.		
18	Appendices			
19	Appendices			

R647-4-104 - Filing Requirements and Review Procedures

Com ment #	Sheet/Page/ Map/Table #	Comments	Initia Is	Revie w Actio n
20	Page 2, paragraph 2	Please remove section 13 from the description of the project area. None of the proposed project is within this section, and much of the supporting baseline and environmental impact information does not include anything within this section. Alternatively, please note in the text that additional permitting requirements will need to be met for inclusion of this area for mining.	lah	
21	Maps all	Please remove the line drawn around section 13 from all maps or note clearly, as stated above, that additional permitting will be required before mining is allowed in this section.	lah	

R647-4-104 - Operator's, Surface and Mineral Ownership

Com ment #	Sheet/Pag e/ Map/Tabl e #		Initia ls	Revie w Actio n
22	Figure 3A	Please label the exploration permit with the permit number as this helps the Division keep track of disturbances and permits in the area.	lah	

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
23	Figure 3A	On figure 3A - please show only the disturbances that are bonded under E/045/0140; how DNI's operations/reclamation will be accommodated, i.e. much of the area has been reclaimed, but the many of the roads still need to be reclaimed. The map currently lists an exploration permit without including the permit number. A map is needed that shows ground currently reclaimed, the roads that will be reclaimed, and disturbed roads that will be reclaimed by Desert Hawk; or add a statement next to the exploration permit in the legend committing to reclamation of all roads within the permit boundary.	lah	
24	Figure 4 & SWP-1	Mine permit boundary is different than on the other maps, please correct.	lah	
25			lah	

R647-4-105 - Maps, Drawings & Photographs

General Map Comments

Com ment #		Comments	Initia Is	Revie w Actio
26	Figure 2	Add TOTAL Bonded acreage figure to items in the legend (as shown 92.5 acres). Include the total disturbed acres on the bond summary sheet. On page 15 disturbed acres is noted as 116.5 acres. Please modify the acreage figures so the document is consistent throughout.	lah	
27	Page 6 Correct the acres for the Yellow Hammer permit; the permit is for more than 5.0 acres, and the pit is larger than 3.3 acres		lah	
28	All Maps	Show the minimum slope of pit floor to indicate how storm water will be held in the pits as noted on page 6. This could be an arrow with the percent slope adjacent to the arrow.		
29	All Maps	Include the access to the head leach area, Figures 5 and 13.	lah	
30	New figure 5	This has been relabeled as Utilities from Facilities – please fix or else change plan to be consistent.	lah	
31	New figure 5			
32	D' 7 10 m . 7		tm	

Com ment #	Sheet/Page/ Map/Table #	Comments	Initia Is	Revie w Actio n
33	Kiewet figure 3	This figure shows the outlet of the sediment pond on the side of the pond when it is in the center. This should be corrected. The diversion cross section A-A' does not show any side slope dimensions; please provide this. Is the bottom width or top width 15 feet? Please provide another cross section of the diversion below the pad and show the side slope dimensions. The design for the diversion in terms of flow and velocity of flow is not provided. Provide the designs for this diversion. The culvert dimensions need to be put on this figure.	tm	

105.1 - Topographic base map, boundaries, pre-act disturbance

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio
34	Figure GWP-10	Commit to a design instead of providing typical designs, describing the calculation used.	tm	
35	Page 12, Page 12 describes a 48-hour, 100-year event, but page 13 lists a 10-year, 24-hour event as 1.3 inches when the precipitation chart shows 1.19 inches. The 100-year, 48-hour event is not a common design storm and the division is wondering why it was chosen. A shorter duration high intensity storm, such as the 100-year, 6-hour storm, would be more appropriate for this area. The Division does not have set criteria for design storms but will require the plan to be consistent in the description in the text.		tm	
36	Page 6 The text notes that Figures 6, 8, and 9 indicate "storm water is to be held against the highwallas shown by the topography." Figure 6 does not does not show storm water being held. The Division suggests the following wording: "Stormwater will be held next to the highwalls, and no storm water will leave the permit area." Mining is dynamic and the topography does not jump from one figure to the next. The suggested blanket statement suggested		lah	
37	Page 7	covers all possibilities age 7 The text notes that Figures 10 and 11say no waste water will be generated, but there has been water in the Yellow Hammer pit all summer in 2011. The Division suggests that you reword to "all water will be held in the pits, and no storm water will leave the permit area." Mining is dynamic and the topography does not jump from one figure to the next. The blanket statement suggested covers all possibilities		
38	Figure 7 Haul trucks will not be able to climbup a 1H:1V slope. Show all haul roads that will access the pit. Several will be needed for the life of the mine., Include each as a separate line item on the bond calculation sheets. It should be possible to reclaim the upper haul roads and receive bond release for these areas fairly quickly.		lah	
39	Figure 10	Remove small mine boundary from the map as it is no longer valid.	lah	

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia ls	Revie w Actio n
40	Figure 10	The outline of the pit and dump is labeled as the Large Mine Permit Boundary – this is not consistent with any other map. It is not clear to OGM if DHGC still wants to mine the Yellow hammer area. It is also no clear if DHGC is planning to mine the dump.	lah	
41	Cross sections – all	sections – the pre and post mining topography to the same drawing. NO RESPONSE		
42	Figure 11	A new haul is shown on figure 11 but not on other maps. It is not clear if this is a typo, but all other maps show the haul road leaving the pit from the southwest side of the pit. The new haul road need to be stitched into the topography, as figure is labeled as final topography.		
43	Figures 9, & 11	Please add a note that all final rock slopes angles will not exceed 1H:1V.	lah	
44	Figures 9, & 11	Please add a note that all new waste rock slopes angles will not exceed 2H:1V.		

105.2 - Surface facilities map

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia ls	Revie w Actio
45	Old and New Figure 5	Show growth medium stockpile for all new disturbances, this includes the Clifton Shears, Herat and north Yellow Hammer areas	lah	
46	New figure 5	The new settlement pond appears to be up stream from the Kiewit dump so that it would not catch or treat runoff from this dump. If this is correct, this portion of the plan needs to be updated to show how drainage will go to the pond.	lah	
47	Figure 12			
48	D		lah	
49	Figure 12 B	Stockpiles need to be included in surety calculations.	lah	
50	Omission	On Figure 12 of the previous submittal from DHGC comment 21), a waters source is listed from the area around Clifton Shears from a mine decline. Include in the bond the tanks, pumps and pipe that are needed to develop a water source in a decline. Simply removing the water source from the map (as noted in written communication) does not remove the need to use water in mining, nor the need to outline the impacts to the water resources, nor the need to include in the surety calculations.	lah	

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia ls	Revie w Actio n
51	Cross sections – all	In the future, there is no need to print the cross sections twice; it is easier to have the pre and post mining topography apply to the same drawing. NO RESPONSE NEEDED	lah	
52	Figures 7A, 9A, & 11A	Add a note to each that no final slopes angles will exceed 1H:1V.	lah	
53	Figure 15	Plan view shows a pyramid, and much of the gold will not be leached – No response is needed	lah	

105.4 - Photographs

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia ls	Revie W Actio n
54	Appendice s	Appendix I – need photo location map	lah	

R647-4-106 - Operation Plan

General Operation Comments

Com ment #	Sheet/Pag e/ Map/Tabl e #		Initia ls	Revie w Actio n
55	Page 8 para 1	The Environmental Assessment referenced in this paragraph is for an exploration program. Please reword to indicate that an Environmental Assessment or Environmental Impact Statement will need to be completed before any mining can be allowed on BLM lands.	lah	

106.2 - Type of operations conducted, mining method, processing etc.

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio
56	Page 8 para 3	The plan references Appendix V, Exhibit 7, but there is no Exhibit 7 listed in the appendix. Please number pages in the Appendix, such as App 7 – page 1, App7 – page 2, etc.	lah	

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
57	Page 9 Para 1	Information about the potential for acid rock drainage is needed for the Clifton Shears Mine. The results will make a large impact on the bond cost, if the Clifton Shears ore is put on the leach pad.	lah	
58	Page 9 Para 2	The plans says Yellow Hammer ore will be hauled to the Cactus mill and placed on the leach pad. There is currently a tailings pile at the location of the leach pad. Either note that the Yellow Hammer will no longer be mined or rewrite and include the location where the tailings will be disposed of.	lah	
59	Page 9 Para 3	Include the crusher permit in Appendix XIV from the Yellow Hammer pit. The permit notes this will be submitted to OGM prior to mining and processing.	lah	
60	Page 9 Para 4	Changing the depth of mining at the Clifton Shears to 40' will greatly increase the footprint. The deepest reach for an excavator is 29.4', and that is for cleaning out a pond or canal and not sheared rock. The foot print on all the maps has not increased for the increase in depth. Please redraw the maps, include the new access road, and make appropriate changes in the bond.	lah	
61	Page 10 Para 3	Commit to follow all federal, state and local rules and regulations regarding blasting.	lah	
62	Page 11 Para 2	Appendix XV - Please note the Compliance Schedule set forth in the Ground water permit. Commit in the text of the NOI to follow this schedule.	lah	7.
63	Page 12 Para 5	What will be the source of the 100,000 gallons per day?	lah	
64	Page 14 Para 3	As noted above the cyanide tank needs to be double lined.	lah	
65	Page 14 Para 4	In the third sentence, it is better to define how the areas will be capped in the worse case scenario.	lah	

106.3 - Estimated acreages disturbed, reclaimed, annually

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
66	New Page 14	The new page submitted on 10-25-2011 is not in sync with the old page 13 or page 16 Please synchronize or submit all new pages, as page 13 and 15 would know be incorrect.	lah	
67	New page 14	Acreage figure is different than on the figure; please make all documents match.	lah	

106.4 - Nature of materials mined, waste and estimated tonnages

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
68	Page 16 Para 2	It is in the operator's best interest to define the exact locations of areas that have been previously affected by mining and exploration activities and of those areas to be affected in the future. This avoids confusion and misunderstanding with the regulatory agencies.	lah	
69	Page 15 Para 3	As written – not all routes are indicated on figures 5 and 19. Some reclamation requirements with the transfer of the Kiewit Exploration permithave yet to be documented in the Kiewit LMO permit.	lah	

106.5 - Existing soil types, location, amount

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia ls	Revie w Actio n
70	Appendix VIII, map on unmarked page 8	Please supply a more legible map. It is very difficult to distinguish soil type boundary lines from roads and other features.	PBB	

106.6 - Plan for protecting & re-depositing soils

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio
71	P. 17, Section 106.6	The plan says the operator will "consider" seeding soil stockpiles. Please include a commitment to seed the stockpiles.	PBB	
72	Section 106.5	This section says eight inches of soil will be salvaged but also says some areas only have a few inches of soil. Based on information in the soil survey there is plenty of material that can be salvaged to make up for areas where there might be a deficit. Please clarify that adequate material will be salvaged so that all areas will have at least eight inches of soil replaced (except as discussed below). Surety calculations will need to be adjusted to account for this change; most of the calculations are for six inches of soil replacement.	PBB	
73	Section 106.5	The surety calculations indicate 15 inches of soil will be placed over the heap leach facility. Please include this commitment in the text.	PBB	

Comm ent #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
74	Page 19 Para 4	This paragraph indicates Rodenhouse Wash is dry, but two springs have been noted in the wash down from the Kiewit permit area.	lah	
75	Page 20 Para 2	Please note the Groundwater construction permit is ready to expire, it is in the best interest of DHGC to renew prior to expiration	lah	
76	Page 20 para 2	Omission – Nothing is mentioned about Clifton ARD	lah	

106.9 - Location & size of ore, waste, tailings, ponds

ommen t #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia ls	Revie w Actio n
77	Page 22 Para 1	As written Clifton Shears will take 4 years to mine out of a total mine life of 6 years. Elsewhere the permit indicates that the Clifton will be buried in the leach pad, digging holes to bury usually doesn't work well on a lined leach pad	lah	
78	Page 22 last para	As written above - Currently there are tailings at the location of the leach pad. Either note that the Yellow Hammer will no longer be mined or rewrite and include the location where the tailings will be disposed of.	lah	

R647-4-108 - Hole Plugging Requirements

Comm ent #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
79	Page 24 Omission	Please include a commitment to plug artesian bore holes as described prior to removal of drilling equipment.	lah	

R647-4-109 - Impact Assessment

109.1 - Impacts to surface & groundwater systems

Comm ent #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
80	App XXII page 11	Dumont does not report whether they did or did not encounter water in their drill holes, but they included a comment on page 11 of their report: "after many problems due to bad ground or subsurface water". At this time there is not enough data to indicate that there will be no impact to ground water.	lah	

Comm ent #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
81	Omission	Page 12 Para 5 notes DHGC is planning on using 100,000 gallons per day. Please discuss the impact to the groundwater system where the water will be removed.	lah	

109.3 - Impacts on existing soils resources

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
82	Page 26 Para 7	As written "a DOGM dictated seed mixture". Please reword: "an OGM-suggested seed mixture" It is the operator's responsibility to achieve revegetation success.	lah	
83	Page 26 Fifth complete paragraph	There should be no reason to develop substitute topsoil; the area contains plenty of soil resources. Please remove this paragraph.	PBB	

109.4 - Slope stability, erosion control, air quality, safety

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
84	Page 27 Slope Stability	MSHA requires a preshift inspection of working areas; please reword to comply with MSHA.	lah	
85	Page 27 Slope Stability	The plan says, "please refer to R647-4-110.2" Please rewrite to, "please refer to R647-4-110.2 of this plan."	lah	
86	Page 28 Para 2	Include the Air Quality crusher permit in Appendix XIV from the Yellow Hammer pit.	lah	

109.5 - Actions to mitigate any impacts

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia ls	Revie w Actio n
87	Page 29 Para 1	Please add a statement that only the limited areas of disturbance have had a cultural resource survey (CRS), and that new surface disturbance outside of the CRS submittal in the future will require an additional CRS.	lah	

R647-4-110 - Reclamation Plan

110.2 - Roads, highwalls, slopes, drainages, pits, etc., reclaimed

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia ls	Revie w Actio n
88	Page 31	The third paragraph says it has been documented and presented to DOGM the evaporation rates in the region exceed precipitation by at least 40 inches per year. OGM prefers that the plan refers to the document in Appendix XIX and includes the stamp of the Engineer of Record.	lah	
89	Old and New Figure 19	Yellow Hammer reclamation does not represent what is currently on the ground. Based on the current excavation the pit will have to be filled in. Include a plan to revegetate more than the pit floor, which is currently under water.	lah	
90	New figure 19	The Clifton Shears areas are noted as highwalls, but the text talks about backfilling. Include this in the bond amount.	lah	118
91	Page 31 thru 34	Much new and revised information has been recently included in the plan. As far as possible, please make firm commitments and include statements of fact rather than vague terminology or conjecture Commit in the text to follow the requirements of DEQ.	lah	

110.5 - Revegetation planting program

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
92	Page 35, Section 110.5	Under "Plant Growth Medium Replacement," the plan says approximately 50,000 cubic yards of growth medium will be stockpiled for reclamation. Based on the acreage figures on Figure 5_1-2011, the Division calculates there would need to be 135,587 cubic yards of soil stockpiled. This is based on 8 inches of soil replacement on 89.5 acres and 15 inches of soil replacement on 19.5 acres. Soil stockpile areas were not included in the Division's calculation. The actual amount of soil needed is probably slightly less than this because part of the haul road will not be fully reclaimed. Please re-calculate the amount of soil to be salvaged and replaced and make appropriate corrections in this section and in bond calculations. Se additional comments below.	PBB	

Com ment #	Sheet/Pag e/ Map/Tabl e #	Comments	Initia Is	Revie w Actio n
93	Section 110.5, Figure 19_2-2011	The reclamation treatments map does not say certain areas will receive soil or be seeded. Rule R647-4-111.12 says, "After final grading, soil materials shall be redistributed on a stable surface, so as to minimize erosion, prevent undue compaction and promote revegetation." Rule R647-4-110 requires "A planting program as best calculated to revegetate the disturbed area." Based on these rules, please show topsoil distribution and revegetation in all areas of the mine except portions of the road that will remain and topsoil stockpiles (these areas would only be exempt from soil distribution requirements).	PBB	
94	Seed Mix, Page 36	The seed mix is acceptable, but the Division recommends deleting orchardgrass. It is not adapted to the area and is not likely to become established.	PBB	

R647-4-113 - Surety

Comm ent#	Sheet/Pag e/ Map/Tabl e #	Comments	Initials	Revi ew Acti on
95	Page 37	Need to sign prior to approval	lah	
96	Omission	Permit notes that all roads inside the old DNI permit will be reclaimed. Please include worse case reclamation costs in the surety sheets.	lah	
97	Omission	Include ore stockpiles on Figure 12A in the reclamation surety sheets.	lah	
98	Reclamati on cost estimate	Item 1. The comments list the haul distance as 100 miles but the calculations use 150 miles; please clarify.	WHW	
99	Reclamati on cost estimate	Item 1. Please list the hazardous disposal facility where material will be taken to in Wendover.	WHW	
100	Reclamati on cost estimate	Item 2. Please discuss where equipment will be disposed of. Can the equipment be disposed of at a recycling center or does it need to be taken to a disposal facility?	WHW	
101	Reclamati on cost estimate	Item 2. Please include the disposal costs for all materials that will not be disposed of at a recycling center. Often the cost of disposing of material is more than the actual demolition costs.	WHW	
102	Reclamati on cost estimate	Item 2. 75 KW Generator. The generator disposal reference number is 02 41 16 13 5000 in the 2010 Means Book is for demolition of buildings with no interior walls. While Means does not have generator removal costs there are costs for equipment removal, or you may use the cost for generator installation minus the equipment costs.	WHW	

Comm ent#	Sheet/Pag e/ Map/Tabl e #	Comments	Initials	Review Action
103	Reclamati on cost estimate	Item 2. Demolition costs are based on a 25-mile haul to a disposal facility. The distance from the site to Wendover is more than 50 miles one way. Please use disposal costs that take into account the distance to a disposal facility. What is the time needed to haul the material on dirt roads?	WHW	
104	Reclamati on cost estimate	Items 4, 5, and 9. Neutralize cyanide/rinse. Please provide supporting material as to the costs of disposing of cyanide contaminated items. What site would the material be transported to for disposal?	WHW	
105	Reclamati on cost estimate	Heap and Process Pond. Please provide detailed calculations that show the equipment costs and manpower needed to reclaim the pond and also the estimated time needed. The estimate of 200 days does not have any supporting information.	WHW	
106	Reclamati on cost estimate	Heap and Process Pond. Please provide details about the haul distances for backfill. The use of a 50-foot push distance for 19 acres may not be an accurate assumption for earthwork costs.	WHW	
107	Reclamati on cost estimate	Earthwork costs. Many earthwork costs are based on Means item 31 23 16 14 4000. That is for a material push of 50 feet. Unless the material is stockpiled 50 feet from the site please include the cost to load and haul the material from the stockpile site to the placement site.	WHW	
108	Reclamati on cost estimate	Earthwork costs. The material push costs are based on a 200 horsepower dozer and the ripping costs are based on a 300 horsepower dozer. The contractor would most likely not use one dozer specifically for pushing and another dozer specially for ripping.	WHW	
109	Reclamati on cost estimate	Forms. Please use the Division's form for bond calculations. The forms used were modified. Please include electronic copy of the bond calculations as spreadsheets.	WHW	
110	Reclamati on costs	Means number 02 41 16.13 5000 states a 50% deductions for buildings with no interior walls rather than \$14.30/cy for disposal. NOTE: disposal costs for landfills are very localized. The Division recommends that you identify the disposal facility and provide the published rates.	WHW	
111	Reclamati on costs	Means number 26 32 13 13 2200 is for a crew R-3 which is for installation only. Please include transportation costs to disposal facility.	WHW	
112	Reclamati on costs	Please include transportation and disposal costs for all tanks in addition to removal costs.	WHW	
113		The topsoil placement will be done using dozers to push the material up a 2H:1V slope. Dozer productivity is greatly reduced when pushing up that slope. In addition, the height of the slope is 150 feet and the push distance is 50 feet. The push distance does not appear compatible with the requirements.	WHW	